

What is claimed is:

- Sub A/
1. A method of addressing a bistable liquid crystal material having incremental reflectance properties disposed between opposed substrates, wherein one substrate has a first plurality of electrodes deposited thereon facing the other substrate which has a second plurality of electrodes disposed thereon, the intersection of the first and second plurality of electrodes forming a plurality of pixels, the addressing method comprising:
7 applying a predetermined number of pulses to the first plurality of
8 electrodes;
9 applying a like number of said predetermined number of pulses to the second
10 plurality of electrodes; and
11 each of said predetermined number of pulses having a different frequency.
1. 2. The method according to claim 1, wherein said predetermined number of pulses are applied in a set period of time.
1. 3. The method according to claim 2, further comprising:
2 preparing said liquid crystal material by applying a preparation pulse to the
3 first and second plurality of electrodes, prior to said applying steps.
1. 4. The method according to claim 2, wherein each of said different frequency pulses are applied to the first and second plurality of electrodes at the same time.
1. 5. The method according to claim 2, wherein the number of said predetermined number of pulses correspond to a different number of reflectances.
1. 6. The method according to claim 2, wherein a number of reflectances at each pixel is equal to two raised to the number of said predetermined number of pulses less one, or less a constant value.
1. 7. The method according to claim 2, wherein said pulses are bipolar.

- 1 8. The method according to claim 2, wherein said pulses are unipolar.
- 1 9. The method according to claim 2, wherein the number of said predetermined
2 number of pulses is equal to a number of incremental reflectances.
- 1 10. The method according to claim 9, wherein said number of incremental reflectances
2 corresponds to a like number of drive periods, each said drive period having a
3 different length of time than all other said drive periods.
- 1 11. The method according to claim 2, wherein said number of said predetermined
2 number of pulses is equal to an exponent number applied to two, wherein the
3 exponent number corresponds to a number of pulses, plus one, or plus a constant
4 value.
- 1 12. The method according to claim 11, wherein said exponent number of pulses
2 corresponds to a like number of drive periods, each said drive period having a
3 different length of time, and wherein the additional pulse corresponds to a
4 preparation pulse.
- 1 13. The method according to claim 12, wherein the shortest drive period is about half
2 the duration of the next longest drive period.
- 1 14. The method according to claim 12, wherein each drive period is at least either about
2 twice as long in duration as the next shortest drive period or about half as short in
3 duration as the next longest drive period.
- 1 15. A liquid crystal display, comprising:
2 a pair of opposed substrates having disposed therebetween a liquid crystal
3 material, one of said substrates having a first plurality of electrodes disposed thereon
4 facing the other of said substrates which has a second plurality of electrodes,
5 wherein the intersection of said first and second plurality of electrodes form a
6 plurality of pixels; and

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7 a drive circuit that applies a predetermined number of pulses to said first
8 plurality of electrodes and a like number of pulses to said second plurality of
9 electrodes, each of said predetermined number of pulses having a different
10 frequency.

- 1 16. The liquid crystal display according to claim 15, wherein said drive circuit applies
2 said predetermined number of pulses in a set period of time.
- 1 17. The liquid crystal display according to claim 15, wherein said drive circuit applies
2 each of said different frequency pulses to said first and second plurality of electrodes
3 at the same time.
- 1 18. The liquid crystal display according to claim 15, wherein said liquid crystal material
2 has incremental reflectance properties and wherein the number of said
3 predetermined number of pulses correspond to a different number of reflectances.
- 1 19. The liquid crystal display according to claim 15, wherein said liquid crystal material
2 has incremental reflectance properties and wherein the number of said
3 predetermined number of pulses is equal to a number of incremental reflectances.

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